

DO NOT ENTER 428
SUB SPEC
ENTERS NEW MATTER

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention concerns a device for assistance with interception by an aircraft for a flight path segment located in a horizontal plane, and a system for assistance with the interception and follow-up of such a segment.

2. Description of Related Art

5 In general, when an aircraft pilot, for instance flying a helicopter, wishes to intercept a flight path in the horizontal plane, he has to perform the following operations:

- identify the flight path part (segment) to be reached, and take a heading for its interception allowing for the effect of wind, if known;
- anticipate the turning of the aircraft to join the flight path without overshoot, depending on the speed of the aircraft and the angle of interception; and
- ensure that the interception flight path is reliable with respect to ground and any nearby obstacles.

10 The precision required to follow an intercepted flight path, including a multitude of segments, varies along said flight path. Accordingly, the flight path monitoring accuracy is far greater during final approach than during cruise flight phases.

15 It is known that the pilot in the approach phase in a horizontal plane uses ILS (Indicator Landing System) type information, displayed by dedicated symbology of varying sensitivity, which is constantly increasing as the aircraft approaches the touchdown point. Conversely, during the cruise phase, in order to provide sufficient accuracy, a flight path segment monitoring procedure

20 in the horizontal plane requires the pilot to select the most appropriate scale at a given moment, so as to comply with the required precision and/or use flight path deviation digital information combined with another dedicated symbology, for instance an [[HSI]] HSI (Horizontal Situation